

# Soil Science Division Update

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USDA-NRCS  
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**KNOW SOIL, KNOW LIFE or No Soil, No Life**

# Soil Science Division Update

- National Cooperative Soil Survey Strategic Plan
- Soils2026
- Focused Teams

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*“By failing to prepare, you are preparing to fail.”*  
— Benjamin Franklin

*“In preparing for battle I have always found that plans are useless,  
but planning is indispensable.”*

— Dwight D. Eisenhower

# Strategic Planning

*“If you don't know where you are going, you'll end up someplace  
else.”*

— Yogi Berra

*“It does not do to leave a live dragon out of your calculations,  
if you live near him”*

— J.R.R. Tolkien, *The Hobbit*

# Vision

A society that values soil  
as an ecological resource

# Mission

Provide knowledge about soils and ecosystems for resource management



## Goals

1. Communicate the importance of soils to society
2. Increase the knowledge base for soils and ecosystems
3. Strengthen and expand collaboration
4. Ensure a critical mass of well-qualified scientists and technical specialists

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## **Soils2026 Vision**

A complete, consistent, correct, comprehensive, and current inventory of the soil resources of the United States.

## **Soils2026 Mission**

Collect, quantify, interpret, and communicate knowledge on soil science to the diverse community of scientists, land managers, and decision-makers dependent upon soil resources.



Ecological  
Site  
Descriptions

Soil Health

Soil  
Inventory

# Soils2026

# Why Soils2026?

## Demand has grown

- Water quality, quantity
- Urban agriculture
- Wetlands
- Climate change
- Watershed planning

## Needs have changed

- Field to county to national in scope
- New customers
- Enhanced data
- Updates

## **An Iterative Approach**

- Combine traditional field work with advanced technologies to increase our understanding of soil-landform-plant community relationships
- Develop national field weeks to address critical or emerging issues

# An Iterative Approach

- Embrace a culture of continuous investigation and improvement
  - Increase knowledge of soil science
  - Increase use of technology and analytics
  - Increase flexibility for a variety of customer and resource needs



# Expectations

- Flexible and adaptable to changing needs
  - Internal and external
- Authoritative information products
  - All products **national in extent** (no gaps)
  - Both properties and classes

# Expectations

- Knowledge vs information
- Using maps vs making maps
- Services vs products
- Relational vs singularity
- Continuous vs completed
- Projects vs acres

# Embrace a Culture of Continuous Investigation and Improvement

“... I cannot conceive of the time when knowledge of soils will be complete. Our expectation is that our successors will build on what has been done, as we are building on the work of our predecessors.” - *R.S. Smith, Director of the Illinois Soil Survey, 1928*

“... if this is to be a permanent nation we must save this most indispensable of all our God-given assets-the soil, from which comes our food and raiment. If we fail in this, remember that much sooner than we have expected this will be a nation of subsoil farmers.” - *H.H. Bennett 1933*

# Resources

- 20 high priority positions
- Agreements with partners (\$800K)
- Supercomputer access (\$200K)
- Additional IT, PR, and programming support (\$100K)

The will to do better

# Progress to Date

- Conceptual stage
  - Team leaders identified
  - Initial concept developed
  - Ideas presented to SSD Headquarters
- Further development of specifics and implementation required

# Soil Science Division Update

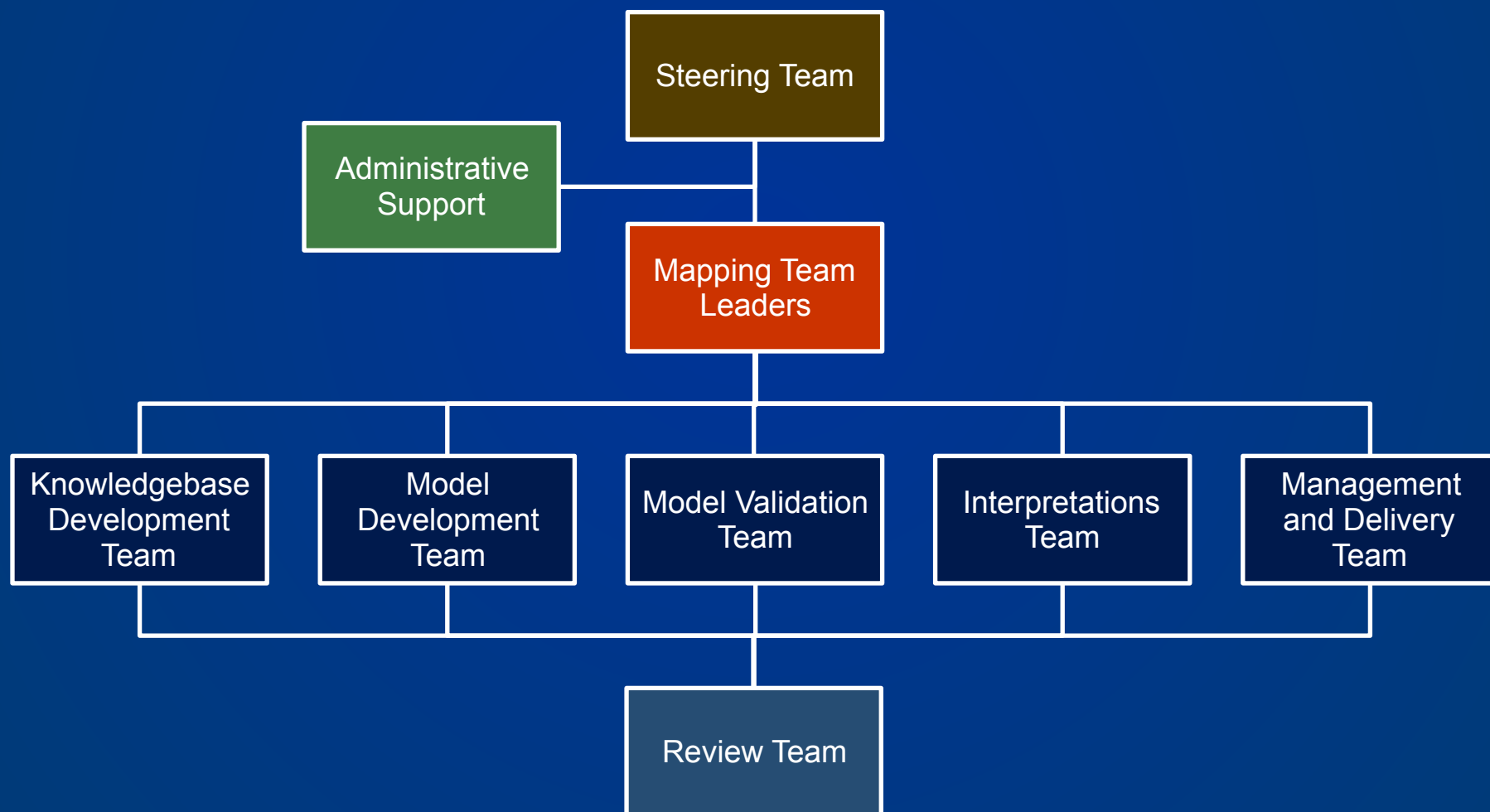
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# Focused Teams

- Digital Soil Mapping
- Urban Soils
- Coastal Zone Mapping
- Training
- Soil Biology
- NASIS
- NCSS
- Taxonomy
- National Ecological Site Technical (NEST)

# Obligatory Organizational Chart





**We  
Need  
YOU!**

# Taxonomy Team

## ➤ Broad Scale

- Wet Soil Order
- Moisture Regimes
- Definitions
  - Kandic
  - Mollic

## ➤ with SSSA

Fundamental  
Changes to Soil  
Taxonomy Task-Force

## ➤ Chairs

- Mark Stolt, URI
- Brian Needleman, UMd

# Soils2026







# Talk to me

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# Questions?



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